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CHICAGO, IL 60601

EXAMINER

LANIER, BENJAMIN E

ART UNIT	PAPER NUMBER
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2132

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12/12/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

09/747,770

Applicant(s)

VANDERGEEST ET AL.

Examiner

Benjamin E. Lanier

Art Unit

2132

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 November 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-31 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 27-31 is/are allowed.
- 6) ☒ Claim(s) 1-26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant argues, “the office action does not indicate how Shi discloses using the user identification data that has been received by an authentication unit, and sent by the first unit, to determine which destination unit, other than the first unit, receives an authentication code to be used to authenticate the user.” This argument is not persuasive because the Office Action mailed 17 August 2007, details on pages 3-4 how Shi meets the claim limitation in question. Shi discloses that the web server (claimed first unit) sends the user id and password (claimed user identification data) to the session manager (claimed authentication unit) for authentication using the DCE security service (Col. 6, lines 27-47 & Col. 8, lines 35-47). If user authentication is successful a unique id (claimed authentication code) is created for the user (Col. 8, lines 55-58). A cookie that includes the unique id is sent to the user (claimed destination unit) (Col. 8, lines 61-63). Shi meets the claim limitation because the user id and password information ultimately identifies where the generated cookie with unique id information will be transmitted upon successful authentication.

2. Applicant argues, “the cited portions of column 6 and column 8 do not refer to sending an authentication code to a determined destination unit that is other than the first unit since the office action indicates that the unique ID is sent back to the client browser which is then provided to the session manager which is alleged to be the authentication unit.” This argument is not persuasive because the Office Action never relies on the client as the claimed first unit, but instead relies on the web server as the claimed first unit. The client of Shi is actually the claimed “destination unit that is other than the first unit,” which clearly meets the claim limitation

because the client is not the web server. Additionally, as admitted by Applicant, the client provides the unique ID back to the session manager, and therefore, Shi meets the limitation of receiving a returned authentication code back after sending the authentication code.

3. Applicant argues, "it is admitted that McCann does not disclose this either since it indicates that McCann discloses obtaining and storing the IP address of a client for the duration of the communication." This argument is not persuasive because this argument is directed from the belief that the client of Shi is relied upon to be the claimed first unit, which is not the case. Therefore, as mentioned above, obtaining and storing the ID address of a client for the duration of the communication such that the generated unique ID can be transmitted to the client using the stored ID address meets the claim limitation because the client of Shi is relied upon to meet the claimed destination unit that is other than the first unit.

4. Applicant argues, "It is alleged that the Shi reference teaches all of the limitations of claim 10 except Shi does not specify that the communication environment is wireless. Applicants respectfully submit that this characterization of the claims is improper since there is specific wireless communication and specific channels and data that are required in the claim to facilitate operation. The office action does not address specific claim language and as such, the rejection is improper. For example, the method requires a primary wireless channel, a wireless back channel, and sending specific authentication code information and other information on specific channels." This argument is not persuasive because Rahman discloses (Col. 10, lines 4-46) that session setup data are transmitted to the wireless device over the reverse circuit switch link (i.e. wireless back channel) and once the session is established communication occurs over the forward circuit switched link (i.e. primary wireless channel). When modified as proposed the

cookie containing the generated unique id would be considered the session setup data and would therefore be transferred over the reverse circuit switch link while actual session communications would be conducted over the forward circuit switched link. It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the web server user authentication system of Shi in a wireless environment because wireless networks take advantage of the inherently bursty and delay-tolerant nature of data traffic to make efficient use of wireless resources as taught by Rahman (Col. 2, lines 37-41).

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1, 2, 4, 6, 7, 17, 18 are rejected under 35 U.S.C. 102(b) as being anticipated by Shi, U.S. Patent No. 5,875,296. Referring to claims 1, 6, 17, Shi discloses a web server user authentication system with cookies wherein a user provides a user id and password to a web server (Col. 8, lines 32-34). The web server sends the user id and password to the session manager for authentication using the DCE security service (Col. 6, lines 27-47 & Col. 8, lines 35-47), which meets the limitation of sending, by a first unit, user identification data to an authentication unit. If user authentication is successful a unique id is created for the user (Col. 8, lines 55-58), which meets the limitation of an authentication code. A cookie that includes the unique id is sent to the user (Col. 8, lines 61-63), which meets the limitation of using, user identification data, sent by the first unit to determine which destination unit will receive an

authentication code to be used to authenticate the user, and sending the authentication code to determine destination unit based on the user identification data because the web server knows which user terminal to transmit the created unique id based upon the previous user id and password that was previously submitted. On subsequent requests for service from the user, the unique id within the cookie, is used as a pointer to the user's credentials in a credential database accessed by the session manager (Col. 6, lines 38-43 & Col. 8, line 66 – Col. 9, line 8), which meets the limitation of returning the authentication code to the authentication unit, and authenticating the user when the returned authentication code matches the sent authentication code.

Referring to claims 2, 7, 18, Shi discloses that the unique id is session based (Col. 3, lines 8-12), which meets the limitation of the step of generating the authentication code on a per authentication session basis and sending the authentication code to the determined destination unit in response to the generated authentication code.

Referring to claim 4, Shi discloses that on subsequent requests for service from the user, the unique id within the cookie, is used as a pointer to the user's credentials in a credential database accessed by the session manager (Col. 6, lines 38-43 & Col. 8, line 66 – Col. 9, line 8), which meets the limitation of the step of receiving user input in response to the step of sending the authentication code and waiting to return the authentication code to the authentication unit until receipt of the user input.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35

U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

9. Claims 3, 8, 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shi, U.S. Patent No. 5,875,296, in view of McCann, U.S. Patent No. 6,052,725. Referring to claims 3, 8, 19, Shi discloses that the web server transmits a generated unique id to the same client which requests services (Col. 8, lines 61-63). Shi does not disclose what client information is maintained allowing the unique id to be transmitted to the same client which requested services. One of ordinary skill in the art would understand that this could be accomplished by obtaining and storing the IP address of the client. McCann discloses obtaining and storing the IP address of a client for the duration of a communication session with an IP network (Abstract), which meets the limitation of maintaining per user destination unit data including at least one destination unit identifier per user and wherein the step of using the user identification data to determine which destination unit will receive the authentication code includes sending the authentication code to the determined destination unit based on the stored per user destination unit identifier. It would have been obvious to one of ordinary skill in the art at the time the invention was made for the session manager associated with the web server of Shi to obtain and store the IP address of the

client in association with the user id/unique id in order to provide reduced response time as taught by McCann (Col. 1, lines 61-63).

10. Claims 5, 9, 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shi, U.S. Patent No. 5,875,296, in view of Schneier, Applied Cryptography. Referring to claims 5, 9, 20, Shi does not disclose that the cookie is digitally signed prior to being authenticated by the session manager. It would have been obvious to one of ordinary skill in the art at the time the invention was made to digitally sign the cookie of Shi in order to verify the source of the cookie as a valid source as taught by Schneier (Pages 35-36).

11. Claims 10, 11, 13, 16, 21, 22, 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shi, U.S. Patent No. 5,875,296, in view of Rahman, U.S. Patent No. 7,218,630. Referring to claims 10, 21, Shi discloses a web server user authentication system with cookies wherein a user provides a user id and password to a web server (Col. 8, lines 32-34). The web server sends the user id and password to the session manager for authentication using the DCE security service (Col. 6, lines 27-47 & Col. 8, lines 35-47), which meets the limitation of sending primary authentication information by a primary authentication information provider to an authentication unit during a session. If user authentication is successful a unique id is created for the user (Col. 8, lines 55-58), which meets the limitation of an authentication code. A cookie that includes the unique id is sent to the user (Col. 8, lines 61-63), which meets the limitation of using the primary authentication information to determine which destination unit will receive an authentication code as secondary authentication information to be used to authenticate the user, and sending the authentication code to the destination unit based on the primary authentication information during the same session because the web server knows which user terminal to

transmit the created unique id based upon the previous user id and password that was previously submitted. On subsequent requests for service from the user, the unique id within the cookie, is used as a pointer to the user's credentials in a credential database accessed by the session manager (Col. 6, lines 38-43 & Col. 8, line 66 – Col. 9, line 8), which meets the limitation of returning the authentication code to the authentication unit during the same session, and authenticating the user when the returned authentication code matches the sent authentication code. Shi does not specify that the communication environment is wireless. It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the web server user authentication system of Shi in a wireless environment because wireless networks take advantage of the inherently bursty and delay-tolerant nature of data traffic to make efficient use of wireless resources as taught by Rahman (Col. 2, lines 37-41).

Referring to claims 11, 22, Shi discloses that the unique id is session based (Col. 3, lines 8-12), which meets the limitation of the step of generating the authentication code on a per authentication session basis and sending the authentication code to the determined destination unit in response to the generated authentication code.

Referring to claims 13, 24, Shi discloses that on subsequent requests for service from the user, the unique id within the cookie, is used as a pointer to the user's credentials in a credential database accessed by the session manager (Col. 6, lines 38-43 & Col. 8, line 66 – Col. 9, line 8), which meets the limitation of the step of receiving user input in response to the step of sending the authentication code and waiting to return the authentication code to the authentication unit until receipt of the user input.

Referring to claim 16, Shi discloses that the web server sends the user id and password to the session manager for authentication using the DCE security service (Col. 6, lines 27-47 & Col. 8, lines 35-47). If user authentication is successful a unique id is created for the user (Col. 8, lines 55-58), which meets the limitation of validating the primary authentication information.

12. Claims 12, 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shi, U.S. Patent No. 5,875,296, in view of Rahman, U.S. Patent No. 7,218,630 as applied to claim 10, 21 above, and further in view of McCann, U.S. Patent No. 6,052,725. Referring to claims 12, 23, Shi discloses that the web server transmits a generated unique id to the same client which requests services (Col. 8, lines 61-63). McCann does not disclose what client information is maintained allowing the unique id to be transmitted to the same client which requested services. One of ordinary skill in the art would understand that this could be accomplished by obtaining and storing the IP address of the client. McCann discloses obtaining and storing the IP address of a client for the duration of a communication session with an IP network (Abstract), which meets the limitation of maintaining per user destination unit data including at least one destination unit identifier per user and wherein the step of using the user identification data to determine which destination unit will receive the authentication code includes sending the authentication code to the determined destination unit based on the stored per user destination unit identifier. It would have been obvious to one of ordinary skill in the art at the time the invention was made for the session manager associated with the web server of Shi to obtain and store the IP address of the client in association with the user id/unique id in order to provide reduced response time as taught by McCann (Col. 1, lines 61-63).

13. Claims 14, 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shi, U.S. Patent No. 5,875,296, in view of Rahman, U.S. Patent No. 7,218,630 as applied to claims 10, 21 above, and further in view of Schneier. Referring to claims 14, 25, Shi does not disclose that the cookie is digitally signed prior to being authenticated by the session manager. It would have been obvious to one of ordinary skill in the art at the time the invention was made to digitally sign the cookie of Shi in order to verify the source of the cookie as a valid source as taught by Schneier (Pages 35-36).

14. Claims 15, 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shi, U.S. Patent No. 5,875,296, in view of Rahman, U.S. Patent No. 7,218,630 as applied to claims 10, 21 above, and further in view of Lewis, U.S. Patent No. 6,738,635. Referring to claims 15, 26, Shi does not specify that the communication environment is wireless. Rahman discloses a wireless environment, but not SMS. It would have been obvious to one of ordinary skill in the art at the time the invention was made to use an SMS wireless channel in the web server user authentication system of Shi because SMS enables communications to be distributed to mobile units at a specified time as taught by Lewis (Col. 11, lines 48-65).

Allowable Subject Matter

15. Claims 27-31 are allowed.

Conclusion

16. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO

MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

17. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Benjamin E. Lanier whose telephone number is 571-272-3805. The examiner can normally be reached on M-Th 6:00am-4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gilberto Barron can be reached on 571-272-3799. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.


Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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Benjamin E. Lanier
Primary Examiner